

- 16 -

CLAIMS

1. An input device to provide input to a computer system, the input device comprising:

a body defining a fluid channel;

a movable element located to be movable responsive to a fluid flow through the fluid channel; and

a light sensor located such that movement of the movable element varies an intensity of light with which the light sensor is illuminated, the light sensor being to generate an input signal in accordance with the intensity of the light with which the light sensor is illuminated.
2. The device of claim 1, wherein the body defines a plurality of fluid channels, the device further including:

a plurality of movable elements, each of the plurality of movable elements being associated with a respective one of the plurality of fluid channels and being movable responsive to a fluid flow through the respective one of the plurality of channels; and

a plurality of light sensors, each of the plurality of light sensors being associated with a respective one of the plurality of movable elements such that movement of the respective movable element varies an intensity of light with which the light sensor is illuminated, each of the plurality of light sensors being able to generate one of a plurality of input signals in accordance with the intensity of the light with which the respective light sensor is illuminated, each of the plurality of input signals operationally providing a distinct input to a computer system.
3. The device of claim 1, wherein the movable element is located within the fluid channel so as to be movable responsive to the fluid flow therethrough.
4. The device of claim 1, wherein the movable element is secured to the body at a fixed end thereof so as to be pivotably movable within the fluid channel.

- 17 -

5. The device of claim 1, wherein the body defines an inlet opening and an exhaust opening for the fluid channel.
6. The device of claim 1, wherein the body defines an opening through which the light sensor is operationally illuminated with ambient light, and the light sensor is located such that the movement of the movable element varies an intensity of ambient light with which the light sensor is illuminated.
7. The device of claim 1, including a light channel operationally to channel the ambient light through the opening to illuminate the light sensor.
8. The device of claim 7, wherein the light channel comprises a light-conductive material.
9. The device of claim 8, wherein the light-conductive material comprises a fiber optic thread.
10. The device of claim 6, including a window that is located in the opening through which the light sensor is operationally illuminated with the ambient light.
11. The device of claim 1, including an artificial light source operationally to supplement the ambient light.
12. The device of claim 11, including an ambient light sensor operationally to sense an intensity of the ambient light, and a controller to activate the artificial light sensor when the intensity of the ambient light, as sensed by the ambient light sensor, is below a predetermined minimum.
13. The device of claim 11, wherein the artificial light source is operationally to supplement the ambient light in accordance with a measured intensity of the ambient light.
14. The device of claim 11, wherein the artificial light source is operationally to supplement the ambient light so as to illuminate the light sensor with a combined intensity above a predetermined minimum intensity.

- 18 -

15. An input device to provide input to a computer system, the input device comprising:

a plurality of light sensors, each to generate a discrete output, and arranged operationally to be illuminated by ambient light; and

a controller, coupled to each of the plurality of light sensors, and operationally to generate an input to a computer system based on at least one discrete output received from the plurality of light sensors.
16. The input device of claim 15, including a body to which each of the plurality of light sensors is attached.
17. The input device of claim 16, wherein each of the plurality of light sensors is accommodated within the body.
18. The input device of claim 15, wherein the body defines at least one opening through which at least one of the plurality of light sensors is operationally illuminated by the ambient light.
19. The input device of claim 18, including a light channel through which the ambient light is operationally channelled, through the at least one opening, to illuminate the at least one of the plurality of light sensors.
20. The input device of claim 19, wherein the light channel comprises a light-conductive material.
21. The input device of claim 20, wherein the light-conductive material comprises a fiber optic thread.
22. The input device of claim 17, wherein each of the plurality of light sensors is housed within a respective chamber defined within the body, and each of the chambers is provided with an opening through which a respective one of the plurality of light sensors is operationally illuminated by the ambient light.
23. A method of manufacturing an input device according to any one of the preceding claims.

- 19 -

24. A kit including an input device according to any one of the preceding claims, and a computer system.